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Via e-mail: [Bethany.Sargent@vermont.gov](mailto:Bethany.Sargent@vermont.gov)

RE: Proposed 2021 Revisions to Vermont Water Quality Standards

Dear Ms. Sargent:

The Vermont Public Power Supply Authority (“VPPSA”) is pleased to submit the below comments regarding the March 3, 2021 draft Water Quality Standard (“VWQS”) revisions, on behalf of itself and its six municipal utility members that own and operate hydroelectric facilities. In preparing its comments VPPSA has relied on its own experience, feedback from member municipalities, and advice from experts at VHB.

As you may be aware, VPPSA met several times between 2017 and 2019 with staff of the Agency of Natural Resources (“VANR”) to discuss concerns its members had with the §401 water quality certification process for hydroelectric facility relicensing. During those meetings the Agency expressed repeatedly that its hands were tied by the existing Vermont Water Quality Standards (“VWQS”) and until those standards were modified VPPSA’s concerns could not be addressed. As a result, VPPSA was surprised and disappointed to see that the proposed VWQS revisions issued in March missed the opportunity to address the concerns VPPSA had raised, and instead appear to create further barriers to hydroelectric operations.

VPPSA’s comments begin with several overarching suggestions, and end with specific reactions to proposed VWQS language. We would be happy to meet further with Agency staff to address these comments prior to the Agency entering the formal Rulemaking process.

## **Further Discussions Should be Held Before Proceeding**

During the stakeholder call on March 5, 2021, several topics were flagged by participants as needing additional discussion and detail. However, these further discussions have not yet occurred, and we believe it is important that prior to moving forward with a draft proposal for Rulemaking, that these topics be explored further with the stakeholder group. As a result, we recommend that the revision process be paused to allow more time for additional pre-rulemaking outreach to be done.

## **Hydroelectricity Production Should be Added as a Designated Use**

The Clean Water Act allows certifying authorities to determine both Existing Uses and Designated Uses for waterways under their administration. The VWQS has historically been challenging to existing hydroelectric facilities by not listing hydroelectricity as a Designated Use and elevating all other uses above renewable energy generation.

Under EPA guidelines hydroelectricity is clearly an Existing Use where hydroelectric dams currently exist and should be listed as such in the VWQS.

Further, hydroelectricity should be listed as a Designated Use for at least the waterways where hydroelectric facilities currently exist. The Vermont legislature has set clear and compelling goals in statute to promote carbon emissions reductions. Those goals contemplate electrification of the Vermont economy, most notably the heating and transportation sectors, and associated reliance on renewable energy including hydroelectricity. The goals also recognize that Vermont will need to promote small scale localized generation to provide resiliency in the more severe storm conditions expected from climate change. This localized generation already exists from Vermont's small hydroelectric generators.

V.S.A. Title 30 §202a details Vermont's energy policy and explicitly contemplates greenhouse gas emissions reductions utilizing renewable generation. V.S.A. Title 30 §8001 further refines this state energy policy by delineating specific goals around renewable energy. These goals include, but are not limited to,

*(2) Supporting development of renewable energy that uses natural resources efficiently and related planned energy industries in Vermont, and the jobs and economic benefits associated with such development, while retaining and supporting existing renewable energy infrastructure.*

*(5) Protecting and promoting air and water quality in the State and region through the displacement of those fuels, including fossil fuels, which are known to emit or discharge pollutants.*

*(6) Contributing to reductions in global climate change and anticipating the impacts on the State's economy that might be caused by federal regulation designed to attain those reductions.*

*(7) Providing support and incentives to locate renewable energy plants of small and moderate size in a manner that is distributed across the State's electric grid, including locating such plants in areas that will provide benefit to the operation and management of that grid through such means as reducing line losses and addressing transmission and distribution constraints.*

*(8) Promoting the inclusion, in Vermont's electric supply portfolio, of renewable energy plants that are diverse in plant capacity and type of renewable energy technology*

The Legislature further elevated the importance of greenhouse gas reduction efforts through the passage of the so-called Global Warming Solutions Act, H.688, in 2020. H.688 revised V.S.A. Title 10 §578(c) to state:

*(c) Implementation of State programs to reduce greenhouse gas emissions. In order to facilitate the State's compliance with the goals established in this section, all State agencies shall consider any increase or decrease in greenhouse gas emissions in their decision-making procedures with respect to the purchase and use of equipment and goods; the siting, construction, and maintenance of buildings; the assignment of personnel; and the planning, design, and operation of programs, services, and infrastructure.*

This revised statutory language explicitly requires VANR to consider the impacts on greenhouse gas emissions in their revision of the VWQS (i.e., in “the planning, design, and operation of programs services, and infrastructure”). VPPSA believes this consideration has not occurred with regard to the proposed revisions.

H.688 further created extensive rulemaking authority for VANR to implement greenhouse gas reduction policies and established legal recourse for individuals and entities that determined VANR was not meeting the required goals. It is VPPSA's position that VANR should use the opportunity of this VWQS update to identify ways that the VWQS could be brought into better alignment with state climate policies and reduce ongoing tensions. Revisions that remove flexibility or place greater burdens on hydroelectric facility licensing are diametrically opposed to the VANR's obligations under H.688.

Prior to passage of H.688, Vermont's greenhouse gas goals were further delineated in the 2016 Vermont Comprehensive Energy Plan (“VCEP”), which is the current plan controlling state energy policy. The VCEP lists the following goals, among others, in relations to electric supply:

- *Plan carefully to meet all three tiers of the RES in a least-cost manner. Strive to lower both energy bills and electric rates.*
- *Maximize opportunities to encourage siting of renewable energy on the built environment, in already disturbed areas, or co-located with other uses in order to minimize conflicts with other land uses and users.*

Maintaining production from existing hydroelectric facilities, many of which have existed for more than a century, is one of the most effective ways to meet both of these VCEP goals.

### **Align the VWQS with other VANR Findings Related to Climate Change**

VPPSA also notes that one of the strategies in the VCEP related to hydroelectric resources is to “Maintain production levels from existing Vermont-based hydro projects to the extent they comply with Water Quality Standards”.

VANR has the power either to promote or to inhibit hydroelectric facility operation, and the effectiveness of state climate policy, through the criteria it builds into the VWQS. Given the requirements placed on VANR in H.688 and the abundance of renewable energy goals in Vermont statute, VPPSA believes that VANR needs to implement its VWQS revisions from the context of maintaining existing hydroelectric production to the extent possible. VWQS revisions should be designed to reduce the hurdles to re-licensing existing hydroelectric facilities, not expanding those hurdles.

While VPPSA recognizes that VANR cannot explicitly consider air quality in the Section 401 certification process, climate change, and the use of renewable energy that combats greenhouse gas emissions and climate change, are indeed water quality issues. Specifically, as VANR has noted in its Climate Change White Papers and Adaptation Framework<sup>1</sup>, climate change is expected to contribute to widespread water quality problems throughout Vermont such as warming water temperatures, lowered dissolved oxygen, physical degradation of aquatic habitat, intensified storm water runoff and associated sediments and pollution, increased frequency and severity of storms and floods causing more erosion and sedimentation, interspersed with longer and more intense droughts. Warming water temperatures are harmful to coldwater fish such as brook and brown trout; lowered dissolved oxygen harms fish and aquatic life, and dissolved oxygen is a longstanding VWQS criterion; physical degradation of aquatic habitat by intensified runoff and sedimentation adversely affects fish habitat and spawning.

Significantly, generation of electricity from renewable sources such as hydropower helps to reduce the effects of climate change, which are driven by emissions of carbon dioxide and other “Greenhouse Gases” into the atmosphere; generation of electricity from non-renewable sources is a major source of such emissions. Acid rain is another harmful effect to Vermont’s water quality that is driven by emissions non-renewable energy sources.

For these reasons, it is VPPSA’s position that the VWQS revisions should seek to address the long term and widespread water-quality impacts of climate change by supporting the continued generation of hydroelectricity at existing facilities.

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<sup>1</sup>[http://climatechange.vermont.gov/sites/climate/files/documents/Data/2013.0610.vtanr\\_.NR\\_CC\\_Adaptation\\_Framework.pdf](http://climatechange.vermont.gov/sites/climate/files/documents/Data/2013.0610.vtanr_.NR_CC_Adaptation_Framework.pdf)

### **Include a Compliance Transition Period**

As VPPSA explained in its meetings with VANR, the changes in permit conditions that occur when a FERC license renews do not align with Vermont’s regulatory process for regulated utilities. VPPSA members who have sought to bond for improvements prior to receiving a renewed FERC license have found themselves caught between the Department of Public Service denying the financing request until a new FERC license was issued, and VANR requiring immediate compliance when the new FERC license Section 401 requirements became effective, which was not possible without upgrades.

VANR should explicitly provide for compliance through a compliance plan where capital investments, or significant changes to operations, are required to meet new permit conditions. Provision of the ability to provide a compliance plan over a reasonable timeframe would better align state regulatory regimes between agencies.

### **Recognize State Limitations under the Clean Water Act Section 401 Certification Rule**

In response to Executive Order 13868, EPA issued revised rules governing Section 401 Water Quality reviews, and associated guidance. Those Rules make it clear that the scope of certifying authority reviews and actions “are limited to assuring that the discharge from a point source into a water of the United States resulting from a federally licensed or permitted activity will comply with “water quality requirements,” as defined in the rule.”

This revised Rule clarifies that states review of federally licensed projects are limited in scope and cannot include conditions beyond the point source discharge impacts on water quality. Unless and until EPA completes a new Rulemaking to revise these rules, any inclusion of criteria beyond the effects of point source discharges in Section 401 reviews and actions represents expansion beyond VANR’s authority.

### **Specific Comments on Proposed Language**

In addition to the above overarching policy comments, VPPSA worked with water quality experts at VHB to develop specific reactions to proposed language in the draft VWQS. Those comments are below:

#### **§ 29A-101 Applicability (b)**

**Proposed Change:** The entirety of this subsection (as pasted below) is proposed to be deleted.

*Concerning any application, the Water Quality Standards in effect at the time of the filing shall apply. These Water Quality Standards shall apply to those applications, including applications for the renewal of existing approvals, that are filed on or after the date upon which the amended standards become effective, and to all other activities that occur after that date.*

**Comment:** This section, or language that is functionally equivalent, has been in the VWQS going back for over 20 years, if not longer. The principle of vesting is a critically important one for applications for complex or contentious projects which can span several years. By deleting this section, an applicant could be required to restart an entire application and review process if the Standards were to change during the pendency of the review. The removal of this language would change longstanding precedent in Vermont, by removing any vesting of a permit application. In response to a verbal comment on this topic, it was noted that this change is being proposed to ensure consistency with the Clean Water Act. However, no specific citation or background that supports that contention has been provided. It is hard to understand why this change is suddenly required to ensure CWA consistency, when the language has been in the Standards for many years, and to our knowledge this issue was never previously raised. This topic was one of the several that was flagged for further review and discussion, which as of this date has not occurred. Given the above, VPPSA recommends that subsection (b) not be deleted from the VWQS.

#### **§ 29A-103(b) Water Quality Policy**

**Proposed Change:** The entirety of this subsection (as pasted below) is proposed to be deleted.

- (b)(1) Water Quality Policy. It is the policy of the State of Vermont to:*
- (A) protect and enhance the quality, character, and usefulness of its surface waters and to assure the public health;*
  - (B) maintain the purity of drinking water;*
  - (C) control the discharge of wastes to waters, prevent degradation of high quality waters, and prevent, abate, or control all activities harmful to water quality;*
  - (D) assure the maintenance of water quality necessary to sustain existing aquatic communities;*
  - (E) provide clear, consistent, and enforceable standards for the permitting and management of discharges;*
  - (F) protect from risk and preserve in their natural state certain high quality waters including fragile high-altitude waters, and the ecosystems they sustain;*
  - (G) manage waters to promote a healthy and prosperous agricultural community, to increase the opportunities for use of the State's forest, parks, and recreational facilities, and to allow beneficial and environmentally sound development.*
- (2) It is further the policy of the State to seek over the long term to upgrade the quality of waters and to reduce existing risks to water quality.*

**Comment:** VPPSA understands that the rationale for this change is that the text proposed for deletion is a direct copy of the policy as included in Statute, so that by referring the reader to Statute, the possibility of inconsistency is avoided should subsequent changes in Statute occur. However, we note that it has been rare for changes in this policy as articulated in Statute to occur, that there are other segments of the

VWQS that are direct copies of what is included in Statute, and that by referring the reader to different places, the Standards become less usable as a stand-alone document in review proceedings. For these reasons we recommend that the language be retained in the Standards.

**§ 29A-103(f)(2) Hydrology Policy**

**Proposed Change:** deletion of “to the extent practicable” from subsection (a).

**Comment:** The Clean Water Act and associated Rules promulgated by EPA recognize that there are cases where it is not practical or in the public interest to set unbendable standards. VPPSA believes that deletion of the proposed language will further exacerbate conflicts between competing state policies and therefore the language should not be deleted.

**§ 29A-103(f)(2) Hydrology Policy**

**Proposed Change:** deletion of “achieving voluntary agreements relating to artificial streamflow regulation that” from subsection (b).

**Comment:** VPPSA is concerned that with this deletion, the meaning of this subsection is changed significantly. The Statute cited (10 V.S.A. §1003) makes no mention of the VWQS, thus having an unmodified statement “to assure consistency with these rules” doesn’t appear to be consistent with the statutory language and appears to create a more expansive opportunity to compel changes than authorized by the Statute. As a result, VPPSA recommends that subsection (f)(2) not be modified from the existing VWQS.

**§ 29A-104(d) Designated Uses**

**Proposed Change:** rearrangement of the order in which the designated uses are listed.

**Comment:** As this has been explained, we understand that this change is not intended to imply any particular prioritization of the specified designated uses. If the change will have no material effect, then VPPSA would prefer that the existing order be maintained so that there is no ambiguity in the intent. Further, VPPSA believes hydroelectric energy production should be added to designated use list.

**§ 29A-104(e) Designated Uses**

**Proposed Change:** New proposed language:

*When existing uses are incompatible, or conflict with designated uses, conditions shall be imposed to attain the water quality necessary to support the highest and best use.*

**Comment:** This is one of the proposed changes that VPPSA believes requires further discussion and review. We have not previously seen the term “highest and best use” in Agency Rules or the VWQS and are concerned that the proposed language creates arbitrary and subjective criterion that would be impossible for an applicant to plan for in the context of a request for Certification. Unless and until further explanation of how the determination of which use(s) are “highest and best” would work in practice, and opportunity for consideration and review is given, we recommend that this language not be inserted to the VWQS. Alternatively, if this wording were to be included in the revised VWQS, VPPSA believes that existing hydroelectric generation, as a renewable energy source, should be designated as a “highest and best” use of waters.

### **§ 29A-206(e) Water Quality Certifications Issued Pursuant to §401 of the Clean Water Act**

**Proposed Change:** New proposed language:

*Section 401 of the CWA requires that for any federally- licensed or permitted activity that may result in a discharge into waters of the United States, the State issue, waive, or deny water quality certification ensuring the discharge will comply with all applicable water quality requirements (33 U.S.C. § 1341). A water quality certification shall not be issued unless there is reasonable assurance that the discharge will not result in a violation of these rules. Any certification issued by the State shall establish conditions necessary to ensure that the federally licensed or permitted activity will comply with these rules, as well as with any other appropriate requirement of state law, including:*

- (a) 10 V.S.A. Chapter 37 (wetlands protection and water quality management);*
- (b) 10 V.S.A. Chapter 41 (regulation of streamflow);*
- (c) 10 V.S.A. Chapter 49A (lakeshore protection standards);*
- (d) 10 V.S.A. § 1264 (stormwater management);*
- (e) 29 V.S.A. Chapter 11 (management of lakes and ponds); and*
- (f) The Vermont Water Withdrawals for Snowmaking Rules.*

**Comment:** We agree that the cited state regulatory programs are each targeted to assure water quality protection in the context of specific applications which trigger reviews under the particular programs, and that in past practice, Agency decisions in the context of §401 Certifications have been informed by these programs/permits/reviews as applicable. From that standpoint, we see this change as beneficial to provide greater regulatory certainty as to the criteria for §401 reviews.

However, it is also important to note that not all of these programs are applicable to all requests for §401 Certification (e.g. a proposed project requiring a stormwater permit would not trigger a review under the Snowmaking Water Withdrawal Rules). Hence we recommend adding “as applicable” to the proposed language, as follows:



*“Any certification issued by the State shall establish conditions necessary to ensure that the federally licensed or permitted activity will comply with these rules, as well as with any other appropriate requirement of state law, **as applicable**, including:”*

Additionally, we note that the present EPA Rules limit VWQS applicability to point source impacts with the Biden Administration considering revisions, and that the Vermont Legislature is currently considering H.108 which would address the issuance of Section 401 Certifications. In light of these potential revisions to guidance we recommend pausing on this change until the legislative process concludes.

### **§ 29A-304 Hydrology Criteria**

**Proposed Change:** New proposed language in subsection (b)(2) applicable to Class B(1) waters:

*The method for ensuring compliance with this subsection is a site-specific flow study or studies.*

**Comment:** We would recommend that consideration be given also to allowing the use of default streamflow values that could be applied in the absence of a site specific study, in the same way that subsection (b)(3) allows for Class B(2) waters. Such default values could be conservatively set so as not to create undue risk to the resource.

### **§ 29A-304 (c) Flow Study Requirements.**

**Proposed Change:** deletion of “the Instream Flow Incremental Methodology (IFIM)” and replacement with “hydraulic habitat studies” as acceptable methodologies for determining streamflow protection requirements pursuant to this section,

**Comment:** As this has been explained, we understand that this change is not intended to prohibit the use of the IFIM methodology, which is well established and accepted nationally, but rather to provide greater flexibility in allowing various methodologies to be used on a case by case basis. On that basis, we do not oppose this proposed change but would recommend clarifying the continued availability of the IFIM methodology.

### **§ 29A-304(e) High Flow Regime**

**Proposed Change:** New proposed language in subsection (2) applicable to Class A(2) and B(2) waters:

Insertion of “*timing*” and “*rate of change*” as criteria that must be considered under this subsection.

**Comment:** We are concerned that this entire section represents a highly subjective standard with no guidance to applicants as to what constitutes an acceptable condition. Further discussion and review is needed before these changes are considered.

**§ 29A-305 Numeric Biological Indices and Aquatic Habitat Assessments**

**Proposed Change:** New proposed language in subsection (a):

*“The Secretary ~~may~~ shall determine whether there is full support of the aquatic habitat use through ...hydrogeomorphic assessments of flow characteristics, physical habitat structure, and stream processes for rivers and streams and aquatic habitat studies for lakes, ponds, and reservoirs. The method for ensuring compliance with this subsection is a site-specific flow study or studies.”*

**Comment:** The replacement of ‘may’ with ‘shall’ removes flexibility from this section, inconsistent with the addition of flexibility in § 29A-304 (c). As a result, studies that may not be applicable at a particular site or project would become mandatory in all cases. The change also prioritizes subjective assessments over the objective Numeric Biological Indices which “may” be applied per subsection (b).

Further, as discussed, to avoid confusion and overly subjective language, it would be helpful to see examples of methods that the Agency would generally find acceptable and consistent with this newly proposed language. Absent such information, as well as opportunity for consideration and review is given, we recommend that this language not be inserted to the VWQS.

Again, thank you for the opportunity to submit these written comments. VPPSA looks forward to working with the Agency to finalize revisions to the VWQS that will set a national standard for aligning water quality and climate goals in a way that maximizes the value of existing renewable resources.

Sincerely,



Kenneth Nolan  
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